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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,236	03/11/2004	Abhay Sharma	U 015074-0	3561
7590 Ladas & Parry 26 West 61 Street New York, NY 10023			EXAMINER PERREIRA, MELISSA JEAN	
			ART UNIT	PAPER NUMBER
			1618	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Office Action Summary

Application No.

10/798,236

Applicant(s)

SHARMA, ABHAY

Examiner

Melissa Perreira

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claims 5-9 are pending in the application. Claims 1-4 were canceled in the amendment filed 3/19/07. Any objections and/or rejections from previous office actions that have not been reiterated in this office action are obviated.

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in WIPO on 12/29/03. It is noted, however, that applicant has not filed a certified copy of the patent application as required by 35 U.S.C. 119(b). The foreign priority document was also not found on the WIPO website.

New Rejections Necessitated by the Amendment to the Claims

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Step c) of instant claim 1 is confusing as it is unclear from the claim language what is being "compared to the files cultured using a media without a neuroactive compound".

4. Claims 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which

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applicant regards as the invention. Step d) of the instant claims describes maintaining the flies of step a) with neuroactive drug for an addition time but not all of the flies of step a) are given the neuroactive drug and therefore would not constitute an additional time but an initial administration of neuroactive drug. For example, the second group of flies is cultured using a media without a neuroactive drug.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (US 6,541,193B2) in view of Wolf et al. (*J. Neuroscience* **2002**, 22, 11035-11044) and Faeldt et al. (US 2004/0076583A1).

7. Sharma et al. (US 6,541,193B2) discloses the method for screening of neuroactive drugs using the fruit fly *Drosophila melanogaster* (abstract; column 1, lines 62-64) with the first step being the culturing of flies (column 2, lines 19-20). The flies are separated in to two groups including a first group fed with normal food and a second group fed with food mixed with an agent (phenobarbital sodium) being screened and fed for 5 days (column 2, lines 23-26; column 3, lines 50-53). The locomotor activities of the flies fed with regular food are compared to the locomotor activities of the flies fed with food mixed with an agent where the increased locomotor activity is indicative of a

psychostimulant activity of the agent (column 2, lines 39-42; column 5, line 2). Sharma et al. (US 6,541,193B2) does not disclose the neuroactive drugs of the instant claims.

8. Wolf et al. (*J. Neuroscience* **2002**, 22, 11035-11044) discloses the analysis of the locomotor activity in *Drosophila* (p11035, paragraph 3). The examination of the locomotor activity, via walking speed (fig 2) consists of alternating the exposure of air and ethanol to the flies. The flies become immobile upon overexposure to ethanol but recover when a stream of air replaces the ethanol and the hyperactive phase caused by the smell of the ethanol is attributable to internal accumulation of ethanol affecting nervous system function is indicative of neural plasticity (p11037, paragraph 1).

9. Faeldt et al. (US 2004/0076583A1) discloses the method of screening for the effects of a test agent on a population of *Drosophila melanogaster* to monitor one or more traits, such as locomotor activity of the test agent, such as pilocarpine (p3, [0041-0042]; p7, [0076]). Two groups or more, including a first group that are administered a test agent and a second reference group, are examined and compared for their locomotor activity (p4, [0050] and [0053]). The traits/locomotor activities are measured by detecting the movement of a population of flies in containers, such as in a horizontal and vertical direction (p3, [0045]; p7, [0079]-[0088]; p8, [0104]).

10. At the time of the invention it would have been obvious to one ordinarily skilled in the art to screen neuroactive drugs by monitoring the locomotor activities of for *Drosophila melanogaster* as taught by Faeldt et al. and Sharma et al. Wolf et al. describes the method of measuring neural plasticity via administering a psychoactive drug (ethanol) to flies and monitoring the recovery from such administration and

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locomotor activities. One would have a reasonable expectation of success for combining the disclosures to monitor the neural plasticity induced by the neuroactive drug to the flies since all experiments require monitoring the locomotor activities upon administration of such a neuroactive drug. It would be obvious to one ordinarily skilled that one would choose all known and readily available neuroactive drugs, such as pilocarpine for such screening methods for an extensive range of drugs in order to obtain the most accurate and detailed data. It is noted that "[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Conclusion

No claims are allowed at this time.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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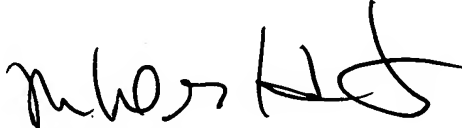
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Perreira whose telephone number is 571-272-1354. The examiner can normally be reached on 9am-5pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Hartley can be reached on 571-272-0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MP
April 16, 2007


MICHAEL G. HARTLEY
SUPERVISORY PATENT EXAMINER